### **Excerpt from Ordinance #2021-35**

#### **Article V. Sewer Extensions.**

# Sec. 34-9. Municipal approval of sewer extensions.

- (a) Sewer extensions require a treatment works approval, issued by the NJDEP, pursuant to N.J.S.A. 58:10A-6 et seq., N.J.A.C. 7:14A-22 et seq. and N.J.A.C. 7:14A-23 et seq.
- (b) Any activity that increases the projected flow to the sanitary sewer system by 2,000 gallons per day or more shall require approval from SBRSA, irrespective of whether or not construction of additional sewer infrastructure is involved.
- (c) The sewer engineer may execute "certification of consent by the governing body" and "certification of consent by the wastewater conveyance system owner" on treatment works approval applications as part of any development submission to the NJDEP or SBRSA for sewer extensions, upon the sewer engineer's determination that the conveyance system has adequate capacity and that the proposed sewer extension conforms with the requirements and conditions of all municipal ordinances, resolutions and regulations and otherwise should be approved consistent with the health, safety and welfare of the Princeton community. Every request for a certification of consent shall be accompanied by a completed treatment works approval application.
- (d) The cost to design, permit, and construct a sewer extension shall be wholly borne by the party or parties seeking the sewer extension.
- (e) During the construction of a sewer extension, the trench shall not be backfilled until so ordered by the sewer engineer. The permittee shall provide at least three business days' prior notice to the sewer engineer to enable said engineer or said engineer's representative to examine the work before ordering the backfilling to be completed. Any part of the work which may have been covered without previously obtaining the consent of the sewer engineer shall be uncovered for examination, if so ordered by the sewer engineer. The backfilling around the sewer extension shall be so executed as not to injure the joints of the pipes, and the backfilling generally shall be so compacted as to permit the restoration of the ground surface as nearly as possible to its former condition or to the approved proposed condition. No sewage will be permitted to discharge into the sewer extension and no permanent connection shall be made to the sanitary sewer system until tests have been made and the sewer found to conform to the sewer engineer's specifications.

#### Sec. 34-10. Design requirements for sanitary sewers.

- (a) The planning, design, construction, installation, modification, testing, and operation of any sanitary sewer shall be in accordance with the criteria set forth in N.J.A.C. 7:14A-23 et seq.; the New Jersey Residential Site Improvement Standards; the applicable NJDEP rules implementing the New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1et seq.); the New Jersey Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.); and for items not covered by NJDEP rules, the ASCE Manual on Engineering Practice No. 60.
- (b) The following requirements shall also apply to the planning, design, construction, installation, modification, testing, and operation of any sanitary sewer:
  - (1) Sanitary sewers shall be designed to be self-cleansing using the tractive force approach as described in Chapter 5 of the ASCE Manual on Engineering Practice No. 60 or by ensuring a minimum velocity of 2.5 feet per second during daily peak flow. Calculations shall use the projected flows for the sewer reach, not pipe-full flows. Where minimum slope requirements for self-cleansing cannot be met due to topographical or downstream constraints, or are otherwise technically impracticable, reduced slopes may be accepted so long as the slopes are maximized within the limits of said constraints;

- (2) Maintenance holes shall be designed to minimize turbulence and energy loss. The difference in the invert elevations of the upstream and downstream pipes in a maintenance hole should not be larger than necessary to maintain a smooth energy grade line and water surface when accounting for changes in slope, direction, diameter, or number of pipes. Excessive differences in invert elevations and drop connections shall be avoided whenever technically practicable, where such features are not necessary to prevent excess fluid velocities or avoid utility conflicts. All drop connection piping must be exterior to the maintenance hole in an outside drop connection configuration;
- (3) A flexible urethane, polyurea, or other elastomer-based coating shall be applied to the exterior of block and brick maintenance holes and to the chimney section of precast concrete maintenance holes to prevent groundwater infiltration. Only products manufactured for this intended use that maintain high adhesive and elastic properties through the product's life shall be used. Coatings shall be applied according to manufacturer's recommendations and shall extend three or more inches onto the maintenance hole frame to prevent water intrusion at the frame and chimney interface; and
- (4) Sanitary sewers shall be constructed to be watertight. Mandrel testing, closed-circuit television video inspections, and infiltration/exfiltration or low-pressure air testing shall be conducted, and identified defects and deficiencies shall be corrected prior to placing the sewer into service. Testing methods shall be conducted in accordance with the ASCE Manual on Engineering Practice No. 60 and applicable ASTM standards. If construction is performed on an existing active sewer, such testing may be performed after the sewer is placed into service where necessary to prevent an interruption of service to connected properties. Low-pressure air testing of active sewers may be substituted for joint-by-joint and lateral testing using test and seal packers.
- (c) The person responsible for constructing a sewer extension or other sanitary sewer work shall obtain any and all necessary approvals from the owners of property on which the work shall be completed, including Princeton. Easements or deed restrictions shall be required for all sanitary sewers which are not within a municipal right-of-way, and shall be subject to the review and approval of the municipal attorney prior to recording. This includes private sanitary sewers located on property owned by the same person which owns and operates the private sanitary sewer. Such easements and/or deed restrictions shall include provisions to prevent the construction of buildings, or other permanent structures; prevent the construction of stormwater management practices designed to infiltrate stormwater into the ground; and prevent the growth of woody vegetation within the easement or deed restriction limits. Easements or deed restrictions shall provide for a minimum width of twenty feet for sanitary sewers that are not more than fifteen feet deep. For sewers that are more than fifteen feet deep, easements or deed restrictions shall provide for a minimum width of thirty feet.
- (d) In the event of any conflict between the requirements set forth in subsection (a) or (b) immediately above, the more stringent requirement(s) shall govern.
- (e) If any design requirement set forth in subsection (a) or (b) above is technically impracticable, then the sewer engineer may, in said engineer's discretion, grant a variance to strict compliance therewith.

# Sec. 34-11. Proximity of water, gas or other utility pipe.

No sewer pipe shall be laid within one foot of a water, gas, or other utility pipe or according to the applicable standards under State or federal statute or regulation, whichever one is more stringent. Likewise, no water, gas, or other utility pipe shall be laid within one foot of a sewer pipe or according to the applicable standards under State or federal statute or regulation, whichever one is more stringent.